

formed by connecting in series the small coil groups W21 and W12, which are offset by 30 electrical degrees, is also produced.

[0068] Moreover, connecting portions that connect together the first and second terminal wires 10*h* and 10*i* for configuring the U1-phase, V1-phase, W1-phase, U2-phase, V2-phase, and W2-phase windings are connecting portions between same-phase winding bodies 10 that are housed in different slot groups, and are same-phase connecting portions 16. The end portions of the first and second terminal wires 10*h* and 10*i* that constitute same-phase connecting portions 16 are end portions of the same-phase connecting first terminal wires and end portions of the same-phase connecting second terminal wires, respectively.

[0069] Second terminal wires 10*i* that constitute first ends of the U1-phase, V1-phase, W1-phase, U2-phase, V2-phase, and W2-phase windings, as shown in FIG. 10, are bent and extend outward radially outward at positions that are closer to the stator core 3 than the other second terminal wires 10*i*. The portions of the second terminal wires 10*i* in question that extend radially outward are thereby spaced apart axially from the portions of the first terminal wires 10*h* that extend radially outward.

[0070] Moreover, first and second terminal wires 10*h* and 10*i* that constitute two ends of the U1-phase winding, the V1-phase winding, the W1-phase winding, the U2-phase winding, the V2-phase winding, and the W2-phase winding are neutral-point connecting terminals and electric power supplying terminals, and together with the first and second terminal wires 10*h* and 10*i* that constitute the same-phase connecting portions 16, are disposed so as to be concentrated within a range of approximately a pitch of two magnetic poles in a circumferential direction. Connecting portions among the neutral-point connecting terminals constitute an alternating-current connecting portion 17. The end portions of the first and second terminal wires 10*h* and 10*i* that constitute the alternating-current connecting portions 17 are end portions of alternating-current connecting first terminal wires and end portions of alternating-current connecting second terminal wires, respectively. The end portions of the first and second terminal wires 10*h* and 10*i* that constitute the electric power supplying terminals are end portions of electric power supplying terminal first terminal wires and end portions of electric power supplying terminal second terminal wires, respectively.

[0071] The connecting member 20 is produced by pressing and shaping a copper sheet, for example, and as shown in FIG. 11, includes: a strip-shaped base 20*a*; and terminals 20*b* that each extend from the base 20*a* in a width direction and are then bent perpendicularly, three terminals 20*b* being disposed on each of two sides in the width direction of the base 20*a* so as to be separated in a longitudinal direction of the base 20*a*. Here, the terminals 20*b* are disposed on the base 20*a* so as to face the end portions of the first and second terminal wires 10*h* and 10*i* that constitute two ends of the U1-phase winding, the V1-phase winding, the W1-phase winding, the U2-phase winding, the V2-phase winding, and the W2-phase winding, i.e., the alternating-current connecting first terminal wires and the alternating-current connecting second terminal wires, which extend radially outward.

[0072] The connecting member 20 is disposed between the end portions of the alternating-current connecting first terminal wires and the alternating-current connecting second terminal wires that are separated axially and extend radially

outward such that the base 20*a* is bent into a circular arc shape, and the terminals 20*b* extend radially outward. The connecting member 20 is positioned such that the end portions of the terminals 20*b* that extend radially outward are stacked approximately axially in contact with the end portions of the alternating-current connecting first terminal wires and the alternating-current connecting second terminal wires that extend radially outward. Then, the end portions of the alternating-current connecting first terminal wires and the end portions of the terminals 20*b* that are stacked approximately axially, and the end portions of the alternating-current connecting second terminal wires and the end portions of the terminals 20*b* that are stacked approximately axially are connected by TIG-welding from radially outside.

[0073] As shown in FIG. 13, a first three-phase alternating-current winding 6A in which the U1-phase winding, the V1-phase winding, and the W1-phase winding are wye-connected and a second three-phase alternating-current winding 6B in which the U2-phase winding, the V2-phase winding, and the W2-phase winding are wye-connected are produced thereby.

[0074] Thus, the stator winding 6 is constituted by a first three-phase alternating-current winding 6A and a second three-phase alternating-current winding 6B. Six electric power supplying terminals U1out, V1out, W1out, U2out, V2out, and W2out are connected to an external electric power supply by means of inverter circuits, and the rotary electric machine operates as an electric motor.

[0075] According to Embodiment 1, the stator winding 6 is configured by mounting distributed winding bodies 10 to a stator core 3 circumferentially at a pitch of one slot so as to be equal in number to a total number of slots 5, the distributed winding bodies 10 each being produced by winding jointless continuous conductor wire 9 that is coated with insulation. The winding bodies 10 are configured such that the first terminal wires 10*h*, which are winding start end portions of the conductor wires 9, extend outward at a first axial end of the stator core 3 from radially innermost positions inside the slots 5, and the second terminal wires 10*i*, which are winding finish end portions of the conductor wires 9, extend outward at the first axial end of the stator core 3 from radially outermost positions inside the slots 5. The first terminal wires 10*h* are each led radially outward so as to pass over the second coil ends 6*b*. The second terminal wires 10*i* are each led radially outward at positions that are nearer to the stator core 3 than the end portions of the first terminal wires 10*h* that are led radially outward over the second coil ends 6*b* of the stator winding 6. The end portions of the intraphase connecting second terminal wires among the second terminal wires 10*i* are stacked in an axial direction with, placed in contact with, and connected to the end portions of the intraphase connecting first terminal wires that are subject to connection therewith among the first terminal wires 10*h*.

[0076] Because the end portions of the first and second terminal wires 10*h* and 10*i* of the winding bodies 10 are led radially outward, the welding directions of the same-phase connecting portions 16 and the alternating-current connecting portions 17 can be oriented in a radial direction.

[0077] Consequently, because it becomes possible for each of the connecting portions in the stator winding 6 to be welded from a radial direction, productivity is improved. The respective connecting portions in the stator winding 6 do not pass over the end portions of the first terminal wires